

Appl. No.: 09/543,962

REMARKS

Claims 1-37 are pending in this application. Claims 3, 19 and 21 have been amended to overcome the claim objections noted by the Examiner. Claims 1, 19 and 28 have been amended.

Claims 19-22 and 38 were rejected under 35 USC 102(e) as being unpatentable over Barrera et al. (US 6,567,800). Claims 1-18, 23-27 and 29-37 were rejected under 36 USC 103(a) as being unpatentable over Barrera et al. (US 6,567,800) in view of Doyle (US 6,510,432). Applicants respectfully disagree.

Independent claim 19, as amended, claims a method for acquiring information pertaining to a document, the document including content information, comprising: creating a meta-document, comprising associating a set of document service requests with the document, wherein a document service comprises a process for using a portion of the document's content information as a starting point to obtain other information from a service provider pertaining to the document's content information; and autonomously activating and managing the document service requests without user intervention, comprising: periodically polling the meta-document for document service requests; selecting a document service request from the set; initiating and managing communication with a service provider to satisfy the selected document service request; and integrating any results from the selected document service request into the meta-document.

Independent claim 28, as amended, claims meta-document, comprising: a document including content information; a set of document service requests associated with the document, wherein a document service comprises a process for using a portion of the document's content information as a starting point to obtain other information from a service provider pertaining to the document's content information; and wherein, responsive to an autonomous scheduler that periodically polls the meta-document for document service requests, a document service request is selected from the set and communication with a service provider to satisfy the selected document service request is initiated and managed; and wherein, responsive to the autonomous

Appl. No.: 09/543,962

scheduler, any results from the selected document service request are integrated into the meta-document.

Nothing in Barrera et al. teaches or suggests Applicants' system as set forth in independent claims 19 or 28, as amended. Barrera et al. describes a system and method for searching information stored on a network. Barrera et al.'s system is a standard search engine, in that a user selects a topic to search and the search engine returns results (in a page of a web browser). Barrera et al. is concerned with the problem of returning better results than other search engines (such as Yahoo and Alta Vista). Barrera et al. describes a system for searching websites that combines category searching with content searching. In the system of Barrera et al. the scope of a search is first narrowed by identifying websites that correspond with a category pertinent to the desired information. Next a keyword search is carryout out on the content of websites that fall within the pertinent category (see col. 2, lines 55-61).

1) Barrera et al.'s system is agent-based. An agent-based system uses an agent, which is typically a software program that performs a service (in this case searching a network and archiving the results). Barrera et al. uses a software application called a spider to collect information and store it in a database. A spider is a computer program that automatically seeks out information (i.e., content) distributed on various nodes of a network and sends it back to a predetermined location (see col. 4, lines 8-12).

Applicants' method creates a meta-document which includes a document (including content information) and a set of document service requests. Applicants' method is autonomous in that the document service requests without user intervention. Applicants' method periodically polls the meta-document for document service requests, selects a document service request from the set; initiates and manages communication with a service provider to satisfy the selected document service request; and integrates any results from the selected document service request into the meta-document.

Appl. No.: 09/543,962

2) Barrera et al.'s system stores search results in a memory. Referring to Fig. 5 of Barrera et al., search computer 501 includes a processor 505 and a memory 506. The memory 506 stores website content correlated with categories 508. After Barrera et al.'s system performs the category and keyword search, the results are sent to the user (307 in Fig. 6). In contrast, Applicants' method integrates any results from the selected document service request 12 into the document.

3) In Barrera et al.'s system documents are static. In Barrera et al.'s agent-based system, documents are static, i.e., documents are things that might be part of a search result. In contrast, Applicants' method creates a meta-document which includes a document (having content information) and a set of document service requests associated with the document. A document service comprises a process for using a portion of the document's content information as a starting point to obtain other information from a service provider pertaining to the document's content information.

Independent claim 1, as amended, claims a system for acquiring information pertaining to a document, the document including content information, comprising: a meta-document including the document and a set of document service requests associated with the document, wherein a document service comprises a process for using a portion of the document's content information as a starting point to obtain other information from a service provider pertaining to the document's content information; and a scheduler for autonomously activating and managing the document service requests without user intervention by periodically polling the meta-document for document service requests, selecting a document service request from the set of document service requests, initiating and managing communication with a service provider to satisfy the selected document service request and integrating any results from the selected document service request into the meta-document.

Nothing in Barrera et al. or Doyle, whether taken alone or in combination, teaches or suggests Applicants' system as set forth in independent claim 1, as amended. Doyle was cited for teaching a scheduler. Nothing in Doyle overcomes the lack of teachings in Barrera et al.

Appl. No.: 09/543,962

4) Doyle's system is an agent-based system. Doyle uses a search and archive agent 20 (see col. 4, lines 40-53) to search for data on a network. An agent-based system uses an agent, which is typically a software program that performs a service (in this case searching a network and archiving the results). In Doyle's system, documents are static, something that might be part of a search result. In contrast, Applicants' system employs a meta-document which includes a document and a set of document service requests associated with the document.

5) Doyle's system uses a data processing system 230 to carry out the agent-based system. Figure 2 of Doyle shows a data processing system 230, which may be configured as a client 12 or a server 15 in his system (see col. 6, lines 32-33). Data processing system 230 includes a processor 238, memory 235, input devices 232 and display 234. In contrast, Applicants' system employs a meta-document and a scheduler for autonomously selecting a document service request from the set of document service requests, initiating and managing communication with a service provider to satisfy the selected document service request and integrating any results from the selected document service request into the document.

6) Doyle's system archives received results in a memory. The search and archive agent 20 of Doyle's system also communicates with an archive program such as archive module 24 illustrated in Fig. 1. The archive module 24 receives retrieved content from the search and archive agent 20 and stores the content in a data repository such as the archive 26 illustrated in Fig. 1. The archive 26 may be a database or other data repository and may be located at the server 16 or may be remote from the server 16. Furthermore, the archive 26 may also be located at the client 12 (see col. 4, lines 54-67). In contrast, Applicants' system integrates any results from the selected document service request into the document.

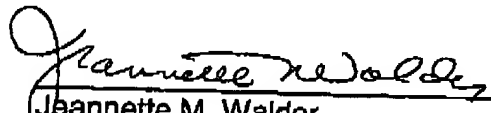
Neither Barrera, et al. nor Doyle teaches or suggests "associating a set of document service requests with the document". Similarly, neither Barrera et al. nor Doyle teaches or suggests "integrating any results from the selected document service request into the document". As noted above, neither Barrera et al. nor Doyle teaches

Appl. No.: 09/543,962

or suggests a meta-document; each of Doyle and Barrera et al. teaches an agent-based system which employs a data processing system. Neither Barrera et al. nor Doyle teaches or suggests "results from the selected document service request are integrated into the meta-document"; each teaches storing results from the search and archive agent in an archive or memory or in the case of Barrera et al. sending the results to the user.

Claims 1, 19 or 28 are believed to be allowable over the cited reference. Claims 2-18, 20-27 and 29-37 depend from Claims 1, 19 and 28, respectively and are also believed to be allowable over the cited references. Reconsideration of this application and allowance thereof are earnestly solicited. In the event the Examiner considers a personal contact advantageous to the disposition of this case, the Examiner is requested to call the undersigned Attorney for Applicants, Jeannette Walder.

Respectfully submitted,


Jeannette M. Walder
Attorney for Applicants
Registration No. 30,698
Telephone: 714-565-1700

Xerox Corporation
Santa Ana, California
Date: May 9, 2005